

In the Claims

1 – 9 (canceled).

10 (previously presented). A method for delivery and expression of a polynucleotide in respiratory epithelium of a mammal, said method comprising administering a nanoparticle to the respiratory epithelium, wherein said nanoparticle comprises a complex of chitosan, or a chitosan derivative, a lipid, and a polynucleotide, wherein said polynucleotide is expressed in the respiratory epithelium, wherein said nanoparticle induces production of less interleukin-6 compared to a particle comprising a complex of the chitosan, or chitosan derivative, and the polynucleotide without the lipid.

11 (canceled).

12 (previously presented). The method of claim 10, wherein said polynucleotide encodes a cytokine.

13-15 (canceled).

16 (previously presented). The method of claim 10, wherein said nanoparticle is administered within a composition comprising a pharmaceutically acceptable carrier.

17 – 23 (canceled).

24 (previously presented). The method of claim 10, wherein said nanoparticle is administered intranasally.

25 – 29 (canceled).

30 (previously presented). The method according to claim 10, wherein said nanoparticle comprises a chitosan derivative.

31 (previously presented). The method according to claim 10, wherein the mammal is human.

32 (previously presented). The method according to claim 10, wherein said nanoparticle is administered to the respiratory tract of the mammal.

33 – 38 (canceled).

39 (previously presented). The method of claim 10, wherein said polynucleotide is surrounded by a monolayer of said lipid, and wherein said nanoparticle comprises a plurality of polynucleotide-lipid inverted cylindrical micelles arranged in a hexagonal lattice.

40 – 42 (canceled).

43 (previously presented). The method of claim 10, wherein said lipid is a cationic lipid.

44 – 48 (canceled).

49 (new). The method of claim 12, wherein the cytokine comprises interferon-gamma.

50 (new). The method of claim 49, wherein the mammal is suffering from asthma.

51 (new). The method of claim 50, wherein said administering alleviates a symptom of asthma in the mammal.